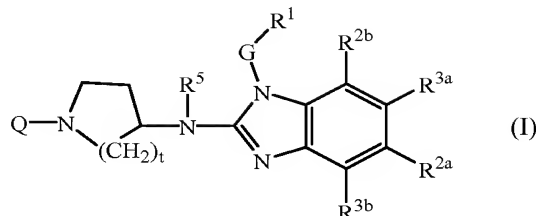


Claims

1. A compound of formula (I)



5 a prodrug, *N*-oxide, addition salt, quaternary amine, metal complex or stereochemically isomeric form thereof wherein

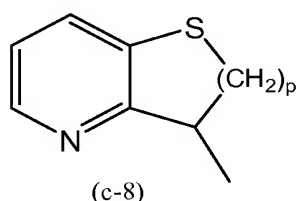
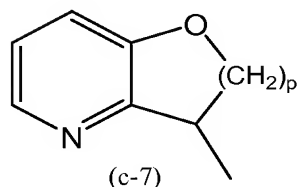
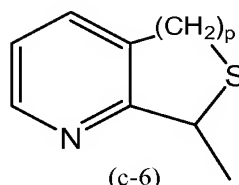
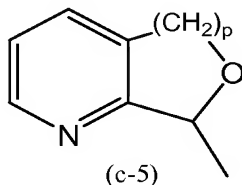
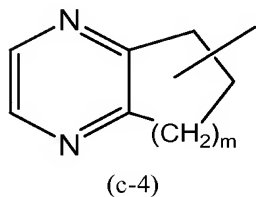
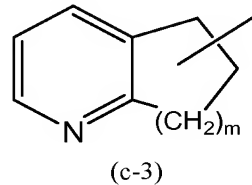
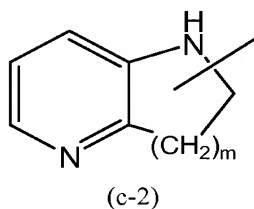
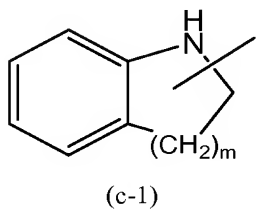
Q is C₁₋₆alkyl optionally substituted with one or more substituents each independently selected from the group consisting of trifluoromethyl, C₃₋₇cycloalkyl, Ar², hydroxy, C₁₋₄alkoxy, C₁₋₄alkylthio, Ar²-oxy-, Ar²-thio-, Ar²(CH₂)_noxy, Ar²(CH₂)_nthio, hydroxycarbonyl, aminocarbonyl, C₁₋₄alkylcarbonyl, Ar²carbonyl, C₁₋₄alkoxycarbonyl, Ar²(CH₂)_ncarbonyl, aminocarbonyloxy, C₁₋₄alkylcarbonyloxy, Ar²carbonyloxy, Ar²(CH₂)_ncarbonyloxy, C₁₋₄alkoxycarbonyl(CH₂)_noxy, mono- or di(C₁₋₄alkyl)aminocarbonyl, mono- or di(C₁₋₄alkyl)aminocarbonyloxy, aminosulfonyl, mono- or di(C₁₋₄alkyl)aminosulfonyl or a heterocycle selected from the group consisting of pyrrolidinyl, pyrrolyl, dihydropyrrolyl, imidazolyl, triazolyl, piperidinyl, homopiperidinyl, piperazinyl, pyridyl and tetrahydro-
pyridyl, wherein each of said heterocycle may optionally be substituted with oxo or C₁₋₆alkyl; or Q is C₁₋₆alkyl substituted with two substituents wherein one substituent is selected from the group consisting of amino, mono- and diC₁₋₄alkyl-
amino and Ar²-C₁₋₄alkylamino and the other substituent is selected from the group consisting of carboxyl, C₁₋₆alkyloxycarbonyl, Ar²-C₁₋₄alkyloxycarbonyl, aminocarbonyl and aminosulfonyl;

G is a direct bond or C₁₋₁₀alkanediyl optionally substituted with one or more substituents independently selected from the group consisting of hydroxy, C₁₋₆alkyloxy, Ar¹C₁₋₆alkyloxy, C₁₋₆alkylthio, Ar¹C₁₋₆alkylthio, HO(-CH₂-CH₂-O)_n-, C₁₋₆alkyloxy(-CH₂-CH₂-O)_n- and Ar¹C₁₋₆alkyloxy(-CH₂-CH₂-O)_n-;

R¹ is Ar¹ or a monocyclic or bicyclic heterocycle being selected from piperidinyl, piperazinyl, pyridyl, pyrazinyl, pyridazinyl, pyrimidinyl, furanyl, tetrahydro-furanyl, thienyl, pyrrolyl, thiazolyl, oxazolyl, imidazolyl, isothiazolyl, pyrazolyl, isoxazolyl, oxadiazolyl, quinolinyl, quinoxaliny, benzofuranyl, benzothienyl, benzimidazolyl, benzoxazolyl, benzthiazolyl, pyridopyridyl, naphthiridinyl,

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1*H*-imidazo[4,5-*b*]pyridinyl, 3*H*-imidazo[4,5-*b*]pyridinyl, imidazo[1,2-*a*]pyridinyl, 2,3-dihydro-1,4-dioxino[2,3-*b*]pyridyl or a radical of formula



;

wherein each of said monocyclic or bicyclic heterocycles may optionally be substituted

- 5 with 1 or where possible more, such as 2, 3, 4 or 5, substituents individually selected from the group of substituents consisting of halo, hydroxy, amino, cyano, carboxyl, C₁₋₆alkyl, C₁₋₆alkyloxy, C₁₋₆alkylthio, C₁₋₆alkyloxyC₁₋₆alkyl, Ar¹, Ar¹C₁₋₆alkyl, Ar¹C₁₋₆alkyloxy, hydroxyC₁₋₆alkyl, mono-or di(C₁₋₆alkyl)amino, mono-or di(C₁₋₆alkyl)aminoC₁₋₆alkyl, polyhaloC₁₋₆alkyl, C₁₋₆alkylcarbonylamino, 10 C₁₋₆alkyl-SO₂-NR^{4a}-, Ar¹-SO₂-NR^{4a}-, C₁₋₆alkyloxycarbonyl, -C(=O)-NR^{4a}R^{4b}, HO(-CH₂-CH₂-O)_n-, halo(-CH₂-CH₂-O)_n-, C₁₋₆alkyloxy(-CH₂-CH₂-O)_n-, Ar¹C₁₋₆alkyloxy(-CH₂-CH₂-O)_n- and mono-or di(C₁₋₆alkyl)amino(-CH₂-CH₂-O)_n-;

each n independently is 1, 2, 3 or 4;

one of R^{2a} and R^{3a} is C₁₋₆alkyl and the other one of R^{2a} and R^{3a} is hydrogen;

- 15 in case R^{2a} is different from hydrogen then R^{2b} is hydrogen or C₁₋₆alkyl, and R^{3b} is hydrogen;

in case R^{3a} is different from hydrogen then R^{3b} is hydrogen or C₁₋₆alkyl, and R^{2b} is hydrogen; or

R^{3b} is C₁₋₆alkyl; and R^{3a}, R^{2a}, R^{2b} all are hydrogen; or

- 20 R^{2b} is C₁₋₆alkyl; and R^{3a}, R^{2a}, R^{3b} all are hydrogen;

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R^{4a} and R^{4b} can be the same or can be different relative to one another, and are each independently hydrogen or C_{1-6} alkyl; or

R^{4a} and R^{4b} taken together may form a bivalent radical of formula $-(CH_2)_s-$;

R^5 is hydrogen or C_{1-6} alkyl;

5 m is 1 or 2;

p is 1 or 2;

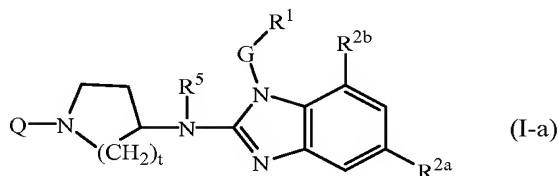
s is 4 or 5;

t is 1, 2 or 3;

10 Ar^1 is phenyl or phenyl substituted with 1 or more, such as 2, 3 or 4, substituents selected from halo, hydroxy, C_{1-6} alkyl, hydroxy C_{1-6} alkyl, polyhalo C_{1-6} alkyl, and C_{1-6} alkyloxy;

15 Ar^2 is phenyl or phenyl substituted with 1 or more, such as 2, 3 or 4, substituents selected from the group consisting of halo, hydroxy, amino, cyano, C_{1-6} alkyl, hydroxy C_{1-6} alkyl, polyhalo C_{1-6} alkyl, amino C_{1-6} alkyl, C_{1-6} alkyloxy, amino-sulfonyl, aminocarbonyl, hydroxycarbonyl, C_{1-4} alkylcarbonyl, mono- or di(C_{1-4} alkyl)amino, mono- or di(C_{1-4} alkyl)aminocarbonyl, mono- or di(C_{1-4} alkyl)aminosulfonyl, mono- or di(C_{1-4} alkyl)amino C_{1-6} alkyl and C_{1-4} alkoxycarbonyl.

20 2. A compound as claimed in claim 1, wherein the compound has the formula



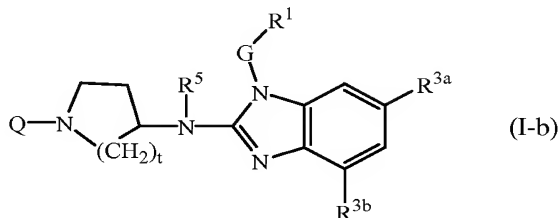
wherein Q, t, R^5 , G and R^1 are as claimed in claim 1; and

R^{2a} is C_{1-6} alkyl;

R^{2b} is hydrogen or C_{1-6} alkyl.

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3. A compound as claimed in claim 1, wherein the compound has the formula



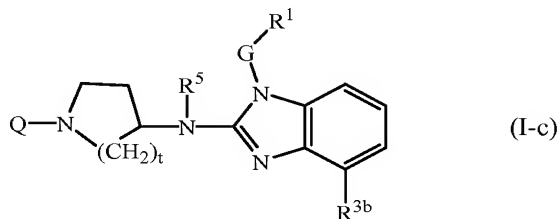
wherein Q, t, R^5 , G and R^1 are as claimed in claim 1; and

R^{3a} is C_{1-6} alkyl;

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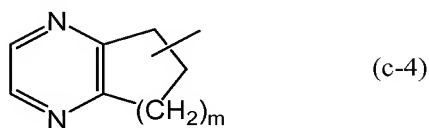
R^{3b} is hydrogen or C_{1-6} alkyl.

4. A compound as claimed in claim 1, wherein the compound has the formula



- 5 wherein Q, t, R^5 , G and R^1 are as claimed in claim 1; and R^{3b} is C_{1-6} alkyl.

5. A compound as claimed in any of claims 1 to 4 wherein t is 2.
- 10 6. A compound as claimed in any of claims 1 to 5 wherein G is C_{1-10} alkanediyl.
7. A compound according to in any of claims 1 - 5, wherein G is methylene.
- 15 8. A compound according to any of claims 1 - 7, wherein R^1 is pyridyl optionally substituted with 1 or 2 substituents independently selected from the group consisting of halo, hydroxy, amino, cyano, carboxyl, C_{1-6} alkyl, C_{1-6} alkyloxy, C_{1-6} alkylthio, C_{1-6} alkyloxy C_{1-6} alkyl, Ar^1 , Ar^1C_{1-6} alkyl, Ar^1C_{1-6} alkyloxy, hydroxy C_{1-6} alkyl, mono-or di(C_{1-6} alkyl)amino, mono-or di(C_{1-6} alkyl)amino- C_{1-6} alkyl, polyhalo C_{1-6} alkyl, C_{1-6} alkylcarbonylamino, C_{1-6} alkyl-SO₂-NR^{4a}-, Ar^1 -SO₂-NR^{4a}-, C_{1-6} alkyloxycarbonyl, -C(=O)-NR^{4a}R^{4b}, HO(-CH₂-CH₂-O)_n-, 20 halo(-CH₂-CH₂-O)_n-, C_{1-6} alkyloxy(-CH₂-CH₂-O)_n-, Ar^1C_{1-6} alkyloxy(-CH₂-CH₂-O)_n- and mono-or di(C_{1-6} alkyl)amino(-CH₂-CH₂-O)_n-.
- 25 9. A compound according to any of claims 1 - 7, wherein R^1 is pyridyl substituted with 1 or 2 substituents independently selected from the group consisting of hydroxy and C_{1-6} alkyl.
10. A compound according to any of claims 1 - 7, wherein R^1 is Ar^1 , quinolinyl, benzimidazolyl, a radical of formula



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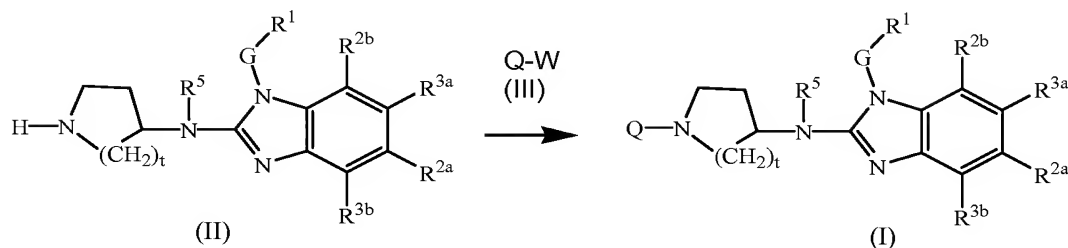
or pyrazinyl; wherein each of the radicals Ar¹, quinolinyl, benzimidazolyl, (c-4), or pyrazinyl may optionally be substituted with the substituents of said radicals as claimed in claim 1.

- 5 11. A compound according to any of claims 1 - 7, wherein R¹ is phenyl optionally substituted with one, two or three radicals selected from the group consisting of halo, hydroxy, C₁₋₆alkyl, C₁₋₆alkyloxy; quinolinyl; a radical (c-4) wherein m is 2, optionally substituted with up to two radicals selected from C₁₋₆alkyl; benzimidazolyl optionally substituted with C₁₋₆alkyl; pyrazinyl optionally substituted with up to three radicals selected from C₁₋₆alkyl.
- 10
12. A compound according to any of claims 1 - 11, wherein R⁵ is hydrogen.
13. A compound according to any of claims 1 - 12, wherein Q is C₁₋₆alkyl optionally substituted with one or two substituents each independently selected from trifluoromethyl, C₃₋₇cycloalkyl, Ar², hydroxy, C₁₋₄alkoxy, Ar²-oxy-, Ar²(CH₂)_noxy, hydroxycarbonyl, aminocarbonyl, C₁₋₄alkylcarbonyl, C₁₋₄alkoxycarbonyl, aminocarbonyloxy, Ar²(CH₂)_ncarbonyloxy, C₁₋₄alkoxycarbonyl-(CH₂)_noxy, mono- or di(C₁₋₄alkyl)aminocarbonyl, aminosulfonyl, mono- or di(C₁₋₄alkyl)aminosulfonyl or a heterocycle selected from pyrrolidinyl, pyrrolyl, dihydropyrrolyl, imidazolyl, triazolyl, piperidinyl, homopiperidinyl, piperazinyl and tetrahydropyridyl, wherein each of said heterocycle may optionally be substituted with oxo or C₁₋₆alkyl; or Q is C₁₋₆alkyl substituted with two substituents wherein one substituent is selected from amino and the other substituent is selected from carboxyl and C₁₋₆alkyloxycarbonyl;
- 15
- 20
- 25
14. A compound according to any of claims 1 - 12, wherein Q is C₁₋₆alkyl optionally substituted with one or two substituents each independently selected from aminocarbonyl, C₁₋₄alkoxycarbonyl, aminocarbonyloxy, Ar²(CH₂)_ncarbonyloxy, mono- or di(C₁₋₄alkyl)aminocarbonyl, aminosulfonyl, mono- or di(C₁₋₄alkyl)aminosulfonyl, pyrrolidinyl, dihydropyrrolyl, piperidinyl, homopiperidinyl and tetrahydropyridyl; or Q is C₁₋₆alkyl substituted with two substituents wherein one substituent is amino and the other substituent is selected from carboxyl and C₁₋₆alkyloxycarbonyl.
- 30
- 35
15. A compound according to any of claims 1 - 12, wherein Q is C₁₋₆alkyl optionally substituted with one substituent selected from aminocarbonyl, C₁₋₄alkoxycarbonyl, aminocarbonyloxy, Ar²(CH₂)_ncarbonyloxy, mono- or di(C₁₋₄alkyl)-

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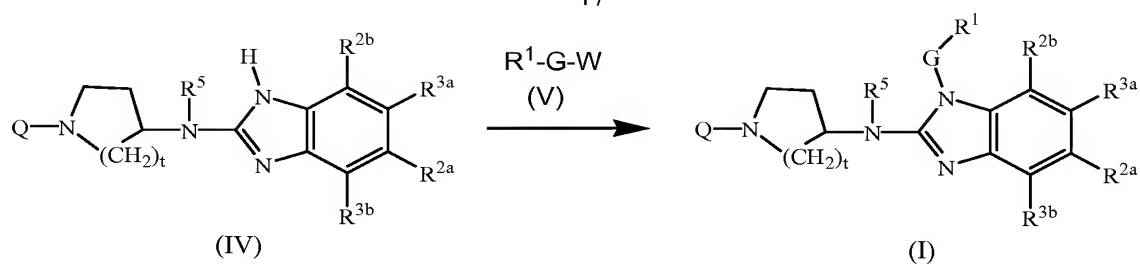
aminocarbonyl, aminosulfonyl, mono- or di(C₁₋₄alkyl)aminosulfonyl, pyrrolidinyl, dihydropyrrolyl, piperidinyl, homopiperidinyl and tetrahydropyridyl, and optionally with a second substituent which is hydroxy or Q is C₁₋₆alkyl substituted with two substituents wherein one substituent is amino and the other substituent is selected from carboxyl and C₁₋₆alkyloxycarbonyl.

16. A compound according to any of claims 1 - 12, wherein Q is C₁₋₆alkyl substituted with aminocarbonyl, C₁₋₄alkoxycarbonyl, aminocarbonyloxy, mono- or di(C₁₋₄alkyl)aminocarbonyl, aminosulfonyl, mono- or di(C₁₋₄alkyl)aminosulfonyl, pyrrolidinyl, dihydropyrrolyl, piperidinyl, homopiperidinyl or tetrahydropyridyl.
17. A compound as claimed in any one of claims 1 to 16 for use as a medicine.
18. A pharmaceutical composition comprising a pharmaceutically acceptable carrier, and as active ingredient a therapeutically effective amount of a compound as claimed in any one of claims 1 to 16.
19. A process for preparing a pharmaceutical composition as claimed in claim 18, said process comprising intimately mixing a pharmaceutically acceptable carrier with a therapeutically effective amount of a compound as claimed in any one of claims 1 to 16.
20. The use of a compound as claimed in any of claims 1 to 16 for the manufacture of a medicament for inhibiting RSV replication.
21. A process for preparing a compound as claimed in any of claims 1 to 23, said process comprising
 - (a) reacting an intermediate of formula (II) with a reagent (III) as in the following reaction scheme:



- (b) reacting an intermediate of formula (IV) with a reagent (V) as in the following reaction scheme:

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wherein Q, G, t, R¹, R^{2a}, R^{2b}, R^{3a}, R^{3b}, R⁵ are as claimed in any of claims 1 to 16;
and optionally converting the thus obtained compounds of formula (I) into their
pharmaceutically acceptable base-addition or acid addition salt form by treatment
with a suitable base or acid and conversely treating the base-addition or acid
addition salt form with an acid or a base to obtain the free form of the compound
of formula (I).